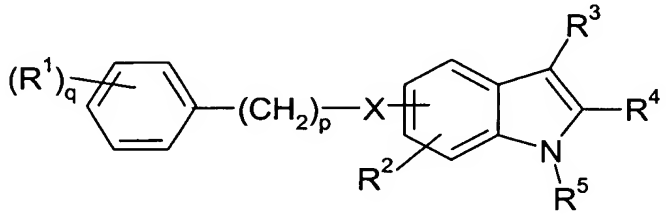
Claims

1. A method for treating angiogenesis or any disease associated with angiogenesis, comprising administering a compound of Formula (I),



Formula (I)

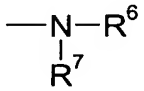
wherein

R^1 is independently selected from halo, hydroxy, amino, alkanoylamino, —OPO_3H_2, or C_{1-4}alkoxy, wherein the amino group is optionally substituted with an amino acid residue and the hydroxy group is optionally esterified;

X is selected from —O—, —S—, —SO—, or —SO_2—;

R^2 is selected from hydrogen, C_{1-4}alkyl, or C_{1-4}alkoxy;

R^3 and R^4 are independently selected from hydrogen, C_{1-4}alkyl, C_{1-4}alkanoyl, C_{1-4}alkoxycarbonyl, C_{1-4}alkoxycarbonylC_{1-4}alkyl, C_{1-4}alkoxycarbonylamino, amino, aminoC_{1-4}alkyl, carbamoyl, carbamoylC_{1-4}alkyl, cyano, cyanoC_{1-4}alkyl, hydroxy, hydroxyC_{1-4}alkyl, or a group of Formula (II)

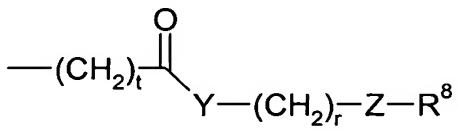


Formula (II)

wherein

R^6 is hydrogen or C_{1-4}alkyl;

$R^5$and R^7 are independently selected from hydrogen, C_{1-4}alkyl, or a group of Formula (III)



Formula (III)

wherein

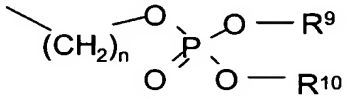
Y is selected from —NH—, —O—, or a bond;

Z is selected from —NH—, —O—, —C(O)—, or a bond;

r is an integer from 0 to 4;

t is an integer from 0 to 1;

R^8 is hydrogen, C_{1-4}alkyl, C_{1-4}alkoxy, aryl, 5- or 6- membered heterocyclyl, 5- or 6-membered heteroaryl, wherein aryl, heteroaryl or heterocyclyl are optionally substituted with C_{1-4}alkyl, C_{1-4}alkoxy, or a group of Formula (IV)



Formula (IV)

wherein

n is an integer from 1 to 6, and;

R^9 and R^{10} are independently selected from hydrogen, C_{1-4}alkyl, or aryl;

p is an integer from 0 to 1; and

q is an integer from 0 to 3;

with the proviso that

(i) when R^3 is cyano, then R^4 cannot be a group of Formula (II), and

(ii) when q is 0, R^3 is cyano, and X is —S—, then R^4 is other than amino;

or a salt, prodrug, or solvate thereof.

2. A method of claim 1, wherein R^1 is hydroxy, amino, —OPO_3H_2, or C_{1-4}alkoxy, wherein the amino group is optionally substituted with an amino acid residue and the hydroxy group is optionally esterified.

3. A method of claim 1, wherein X is —O— or —S—.

4. A method of claim 1, wherein R^3 is cyano.

5. A method of claim 1, wherein

R^1 is selected from hydroxy, amino, —OPO_3H_2, or C_{1-4}alkoxy, wherein the amino group is optionally substituted with an amino acid residue;

R^2 is hydrogen;

X is selected from —O—, —S—, —SO—, or —SO_2—;

p is 0 or 1;

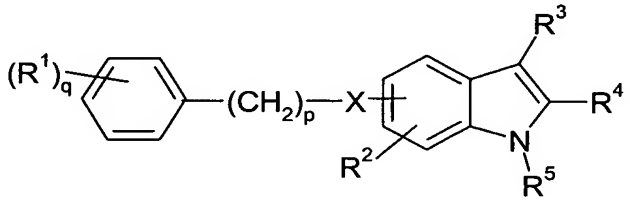
q is an integer from 1 to 3;

R^3 is selected from hydrogen, cyano, carbamoyl, carbamoylC_{1-4}alkyl, C_{1-4}alkanoy, or C_{1-4}alkoxycarbonyl;

R^4 is selected from hydrogen, cyano, or carbamoyl; and

R^5 is hydrogen or C_{1-4}alkyl.

6. A method for treating angiogenesis or any disease associated with angiogenesis, comprising administering a compound of Formula (V),



Formula (V)

wherein

q is from 1 to 3; and

R^1, R^2, R^3, R^4, R^5, X and p are as defined in claim 1,

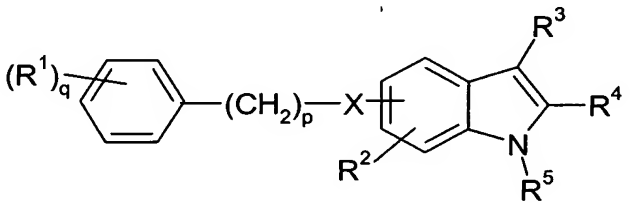
with the proviso that:

(i) when R^3 is cyano, then R^4 cannot be a group of Formula (II); and

(ii) when $(R^1)_q$ is 4-methoxy, 4-amino, or 3,4,5-trimethoxy, p is 0 or 1, R^2 is hydrogen or 5-methoxy, R^3 is hydrogen, cyanomethyl, or 2-aminoethyl, and R^4 is hydrogen or ethoxycarbonyl, then R^5 cannot be hydrogen or methyl;

or a salt, prodrug or solvate thereof.

7. A compound of Formula (VIId),



Formula (VIId)

wherein

R^1 is independently selected from hydroxy, amino, alkanoylamino, —OPO_3H_2, or C_{1-4}alkoxy, wherein the amino group is optionally substituted with an amino acid residue and the hydroxy group is optionally esterified;

X, p, R^2, R^3, R^4, and R^5 are as defined in claim 1;

q is an integer from 1 to 3;

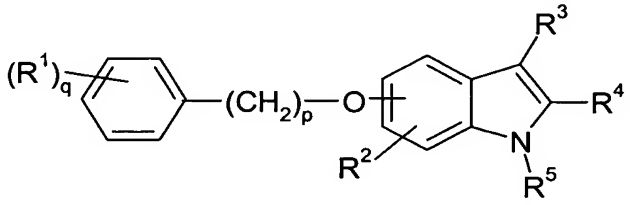
with the proviso that

(i) when R^3 is cyano, then R^4 cannot be a group of Formula (II); and

(ii) when $(R^1)_q$ is 4-methoxy, 4-amino or 3,4,5-trimethoxy, p is 0 or 1, R^2 is hydrogen or 5-methoxy, R^3 is hydrogen, cyanomethyl, or 2-aminoethyl, and R^4 is hydrogen or ethoxycarbonyl, then R^5 cannot be hydrogen or methyl;

or a salt, prodrug or solvate thereof.

8. A compound of Formula (VI),



Formula (VI)

wherein

q is from 1 to 3;

p, R^1, R^2, R^3, R^4, and R^5 are as defined in claim 7;

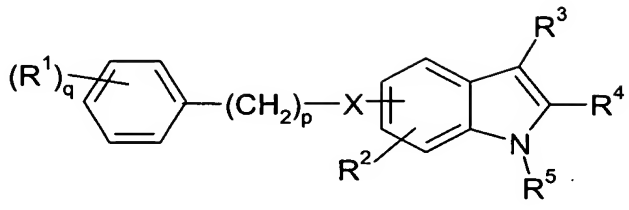
with the proviso that

(i) when R^3 is cyano, then R^4 cannot be a group of Formula (II);

(ii) when $(R^1)_q$ is 4-methoxy, 4-amino, or 3,4,5-trimethoxy, p is 0 or 1, R^2 is hydrogen or 5-methoxy, R^3 is hydrogen, cyanomethyl or 2-aminoethyl, and R^4 is hydrogen or ethoxycarbonyl, then R^5 cannot be hydrogen or methyl;

or a salt, prodrug or solvate thereof.

9. A compound of Formula (VIIc)



Formula (VIIc)

wherein

X is selected from: —S—, —SO—, or —SO_2—; and

p, q, R^1, R^2, R^3, R^4, and R^5 are as defined in claim 7;

with the proviso that

(i) when R^3 is cyano, then R^4 cannot be a group of Formula (II);

(ii) when $(R^1)_q$ is 4-amino, p is 0 or 1, R^2 is hydrogen, R^3 is hydrogen, and R^4 is hydrogen or ethoxycarbonyl, then R^5 cannot be hydrogen;

or a salt, prodrug or solvate thereof.

10. A compound, of claim 7, selected from:

3-cyano-5-phenylsulphanyl-1*H*-indole;

3-cyano-5-phenoxy-1*H*-indole;

3-cyano-5-(4-hydroxyphenoxy)-1*H*-indole; and

2-cyano-5-benzyloxy-1*H*-indole;

1-methyl-3-cyano-5-(4-hydroxy-3,5-dimethoxyphenoxy)-1*H*-indole;

1-methyl-3-cyano-5-(4-phosphonoxy-3,5-dimethoxyphenoxy)-1*H*-indole;

3-cyano-5-(3,4-dimethoxyphenylsulphanyl)-1*H*-indole;

1-methyl-3-cyano-5-(3,4-dimethoxyphenylsulphanyl)-1*H*-indole;

3-cyano-5-(3,4-dimethoxyphenylsulphonyl)-1*H*-indole; and

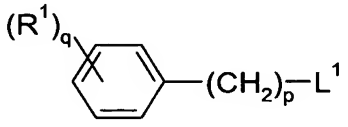
1-methyl-3-cyano-5-(3,4-dimethoxyphenylsulphonyl)-1*H*-indole;

or salt, prodrug or solvate thereof.

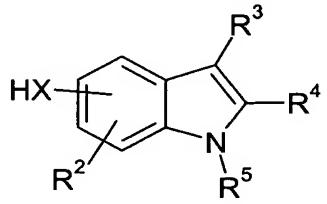
11. A pharmaceutical composition comprising a compound according to any one of Claims 7 to 10 or a pharmaceutically acceptable salt, solvate or prodrug thereof.

12. A process for preparing a compound of claim 1, or salt, solvate or prodrug thereof, comprising

a) for compounds of Formula (I) wherein X is —O— or —S—, reacting a compound of Formula (A) with a compound of Formula (B),



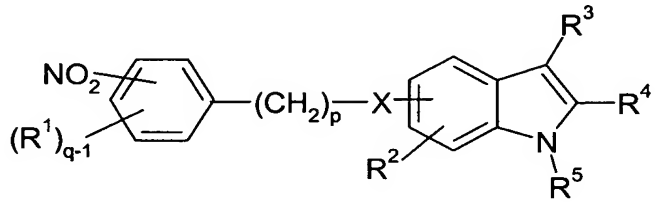
Formula (A)



Formula (B)

wherein L^1 is a leaving group;

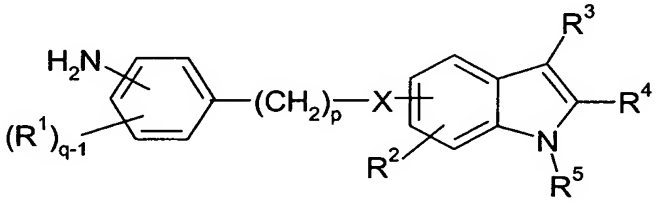
b) for compounds of Formula (I) in which R^1 is amino, reduction of a compound of Formula (C):



Formula (C);

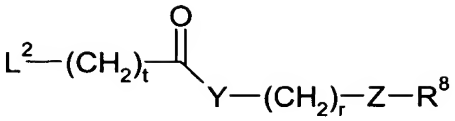
c) for compounds of Formula (I) wherein R^5 is C_{1-4}alkyl, reacting a compound of Formula (I) wherein R^5 is hydrogen with a suitable alkylhalide;

d) for compounds of Formula (I) wherein R^1 comprises an amino group substituted with an amino acid residue, reacting a compound of Formula (D) with an amino acid,



Formula (D);

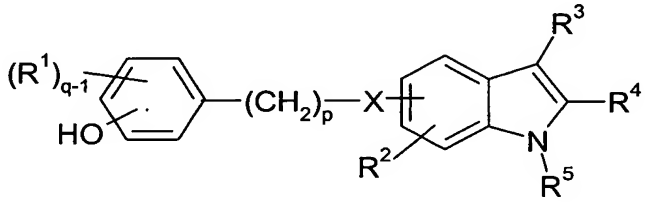
e) for compounds of Formula (I) in which R^3 is a group of Formula (II) and R^7 is a group of Formula (III), reacting a compounds of Formula (I) in which R^3 is a group of Formula (II) and R^7 is hydrogen with compounds of Formula (E) below, in which L^2 is a leaving group:



Formula (E);

f) for compounds of Formula (I) in which R^4 is hydrogen, reacting compounds of Formula (I) in which R^3 is hydrogen and R^4 is hydrogen with compounds of L^3R^3 in which L^3 is a leaving group; and

g) for compounds of Formula (I) in which R^1 is an esterified hydroxyl group, reacting a compound of Formula (F) with an appropriate carboxylic acid or carboxylic acid derivative;



Formula (F)

and thereafter optionally

i) converting a compound of Formula (I) into another compound of Formula (I);

ii) removing any protecting groups;

iii) forming a salt, prodrug or solvate.